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=> d his

     (FILE 'USPAT' ENTERED AT 10:22:18 ON 10 MAY 1999)
L1             3 S 5548646/PN,RLPN,BI,USREF
L2            24 S 5548646/PN,RLPN,BI,UREF
L3            21 S L2 NOT L1
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     (FILE 'USPAT' ENTERED AT 12:25:15 ON 10 MAY 1999)
L1            43 S SONI,?/IN
L2          6320 S 380/CLAS
L3             0 S L1 AND L2

=> del his

DELETE ALL L# ITEMS? (Y)/N:y


=> s encapsul? head?

          62904 ENCAPSUL?
         504454 HEAD?
L1           37 ENCAPSUL? HEAD?
                  (ENCAPSUL?(W)HEAD?)

=> s 380/clas

L2         6320 380/CLAS

=> s l1 and l2

L3            1 L1 AND L2

=> d
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1. 5,548,646, Aug. 20, 1996, System for signatureless transmission and reception of data packets between computer networks; Ashar Aziz, et al., **380/23**; 382/124, 302 [IMAGE AVAILABLE]

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=> d l1 1-
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1. 5,898,838, Apr. 27, 1999, Editor for developing statements to support i/o operation on open network using segregator for segregating protocol statements from application statements upon verification of correspondence; Richard Hiers Wagner, 707/523, 524 [IMAGE AVAILABLE]

2. 5,883,890, Mar. 16, 1999, Mobile packet communication system; Kazuhiro Okanoue, et al., (WITHDRAWN)

3. 5,841,769, Nov. 24, 1998, Data message routing system for mobile or fixed terminals within a network; Kazuhiro Okanoue, et al., 370/338, 401 [IMAGE AVAILABLE]

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[IMAGE AVAILABLE]

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11. 5,718,949, Feb. 17, 1998, Diamond-like carbon encapsulation of magnetic heads; Allan E. Schultz, et al., 427/249; 216/41; 427/122, 402 [IMAGE AVAILABLE]

12. 5,684,800, Nov. 4, 1997, Method for establishing restricted broadcast groups in a switched network; Kurt Dobbins, et al., 370/401, 432, 469 [IMAGE AVAILABLE]

13. 5,640,292, Jun. 17, 1997, Diamond-like carbon encapsulation of magnetic heads; Allan E. Schultz, et al., 360/125, 122 [IMAGE AVAILABLE]

14. 5,621,189, Apr. 15, 1997, Coated conduit outlet fitting; John J. Dodds, 174/50, 17CT, 50.51; 220/3.8, 378 [IMAGE AVAILABLE]

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=> d 2 fro

US PAT NO: 5,640,456 [IMAGE AVAILABLE] L3: 2 of 7
DATE ISSUED: Jun. 17, 1997
TITLE: Computer network encryption/decryption device
INVENTOR: **Richard L. Adams, Jr.**, Fairfax, VA
Peter D. Hallenbeck, Elfland, NC
ASSIGNEE: Uunet Technologies, Inc., Falls Church, VA (U.S. corp.)
APPL-NO: 08/500,071
DATE FILED: Jul. 10, 1995
REL-US-DATA: Continuation of Ser. No. 305,509, Sep. 13, 1994, Pat. No. 5,442,708, which is a continuation of Ser. No. 28,437, Mar. 9, 1993, abandoned.
INT-CL: [6] H04L 9/00
US-CL-ISSUED: 380/49, 9, 50
US-CL-CURRENT: **380/49, 9, 50**
SEARCH-FLD: 380/9, 23, 25, 49, 50, 4, 10, 28, 29, 30
REF-CITED:

U.S. PATENT DOCUMENTS

4,159,468	6/1979	Barnes et al.	380/50 X
5,442,708	8/1995	Adams, Jr. et al.	380/49
5,444,782	8/1995	Adams, Jr. et al.	380/49

ART-UNIT: 222
PRIM-EXMR: Bernarr E. Gregory
LEGAL-REP: Bell, Seltzer, Park & Gibson

ABSTRACT:
A computer network encryption/decryption device includes at least one microprocessor, microprocessor support hardware, at least two network ports for connecting to upstream and downstream networks, memory hardware for storing program, configuration, and keylist data, and data encryption/decryption hardware. Both network ports have the same network address, making the device transparent to the local area network in which it is spliced. The device operates by selectively encrypting or decrypting only the data portion of a data packet, leaving the routing information contained in the header and trailer portions of the data packet unchanged.
6 Claims, 10 Drawing Figures

=> d 2 claims

'CLAIMS' IS NOT A VALID FORMAT FOR FILE 'USPAT'
ENTER DISPLAY FORMAT (CIT):clm

US PAT NO: 5,640,456 [IMAGE AVAILABLE] L3: 2 of 7

CLAIMS:

CLMS(1)

What is claimed is:

1. A method for encrypting a first packet transmitted from a first computer network to a second computer network, wherein said first packet includes a header field containing information about the first packet and

a data field containing data, said method comprising the steps of:
receiving said first packet from said first network;
extracting said information about the first packet from said header field of said first packet;
comparing said information about the first packet with matching criteria including a list of source addresses, a list of destination addresses, and key information, to determine if said first packet is to be encrypted; and
encrypting said first packet if said first packet is to be encrypted.

CLMS(2)

2. The method of claim 1 further including the step of:
transmitting a second packet to said second network if said first packet has been encrypted, said second packet comprising a second header field containing information about the second packet, and a second data field containing said encrypted first packet.

CLMS(3)

3. The method of claim 1 further including the step of:
transmitting said first packet to said second network if said first packet has not been encrypted.

CLMS(4)

4. A method for decrypting the data field of a second packet transmitted from a second computer network to a first computer network, wherein said second packet includes a header field containing information about the second packet and a data field containing data, said method comprising the steps of:
receiving said second packet from said second network;
extracting said information about the second packet from said header field of said second packet;
comparing said information about the second packet with matching criteria including a list of source addresses, destination addresses and key information, to determine if said data field of said second packets is to be decrypted; and
decrypting said data field of said second packet if said second packet is to be decrypted.

CLMS(5)

5. The method of claim 4 further including the step of:
transmitting a first packet to said first network if said data field of said second packet has been decrypted, said first packet comprising said decrypted data field of said second packet.

CLMS(6)

6. The method of claim 4 further including the step of:
transmitting said second packet to said first network if said data field of said second packet has not been decrypted.